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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,817	02/24/2004	Leo W. Davis	DTIN-27,616US	5123
31782	7590	08/21/2007	EXAMINER	
Handley Law Firm, PLLC Roger N. Chauza, PC PO BOX 140036 IRVING, TX 75014			SCHWARTZ, CHRISTOPHER P	
			ART UNIT	PAPER NUMBER
			3683	
			MAIL DATE	DELIVERY MODE
			08/21/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/786,817

Applicant(s)

DAVIS, LEO W.

Examiner

Christopher P. Schwartz

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,8,9,12,13 and 16-18 is/are rejected.
- 7) ☒ Claim(s) 5-7,10,11,14,15,19,20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

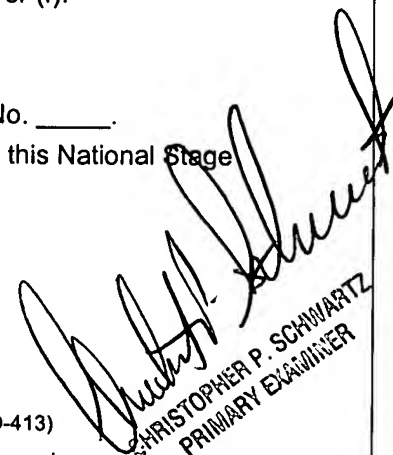
- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

  
CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER

**DETAILED ACTION**

1. Applicant's response filed May 18, 2007 has been received and considered. No amendment to the claims has been made to place them into condition for allowance.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 12-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claim 12 it is unclear from the specification what "seal" applicants are claiming. In their remarks applicant's point to the seal assembly at 80 and 82. It is unclear how this "seal" is located as claimed on lines 14-15 of claim 12.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 rejected under 35 U.S.C. 103(a) as being unpatentable over Rubel in view of Gordaninejad et al..

Regarding claim 1 Rubel, as clearly can be seen in the drawings, shows a suspension strut comprising a primary fluid chamber 6, a secondary fluid chamber 5 or 12, a displacement member 7,8, and a "compressible ER fluid" (since all fluids are compressible to some degree -- even if small). Note the sleeve at 9 or 11 and the apertures at 22 and 33-35. Although not applied see the similarly structured reference to Delchev and note the location of the apertures may be changed or altered in Rubel.

Lacking in Rubel is a showing of an electromagnetically controlled fluid.

It is notoriously well known that ER and MR fluids are interchangeable in the art of motor vehicle suspension systems. Although not applied see Schwemmer et al. claim 5.

The reference to Gordaninejad et al. is relied upon to provide an example of an MR fluid type damper.

It would have been obvious to the ordinary skilled worker in the art to have modified the damping apparatus of Rubel to include electromagnetic coils or permanent magnets so that it could use an MR fluid as the damping medium. Obviously the type and viscosity of the fluid (i.e. particle, size and type) could be varied to meet predetermined damping characteristics.

Regarding claims 2-4 these requirements are fairly suggested by the references above.

6. Claims 8,9,12,13,16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rubel in view of Gordaninejad et al. and Davis '341.

Regarding claims 8-9,12,13,16-18 Rubel in view of Gordaninejad et al. are relied upon as explained above.

The patent to Davis shows it is known that a device such as Rubel could be modified to be used in place of the struts 28 in a vehicle suspension system.

### ***Response to Arguments***

Applicant's arguments filed May 18, 2007 have been fully considered but they are not persuasive. Applicant's state in their remarks that the damper of Rubel teaches away from their invention since claim 1 requires that their secondary fluid chamber 26 is in "fluid communication" with opposite sides of the damper element. It is unclear to the examiner why applicant's seem to think the secondary fluid chamber 5, or for that matter chamber 12, is not in communication with opposite sides of the damper element 7. As broadly claimed by applicant's, it is—since fluid can flow from these chambers through the valve element 21 into chamber 6 as the damper element reciprocates. Therefore fluid from either chamber 5 or 12 (secondary fluid chamber) is in fluid communication (as broadly claimed) with opposite sides of the damper element, even if indirectly.

Applicant's also states that Rubel does not control both an effective pressure of the fluid within the primary fluid chamber 6 and an intensity of the electromagnetic field.

Rubel does state in column 3 lines 52-56 that the shear stress of the damping fluid is varied by applying an electrostatic field to the electrorheological fluid. Element 30 is used as the first electrode, but that 11 or 15 can be used as the second electrode. See top of column 4.

The rejection however was Rubel in view of Gordaninejad et al., with several other electromagnetic arrangements pointed out that are known in the art. See the arrangement taught by Delchev '210 at 18 and 12,15. The examiner maintains that such a substitution of a permanent magnet or electromagnetic coil for the sliding electrode 30 would have been obvious without destroying the inventive intent of Rubel.

***Allowable Subject Matter***

7. Claims 5-7,10,11,14,15,19,20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

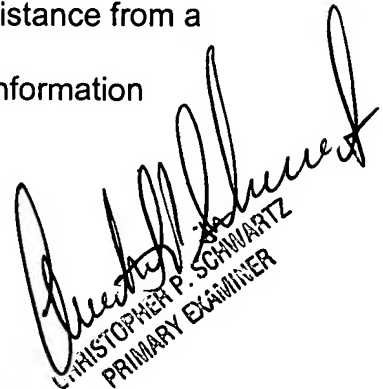
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jim McClellan can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Cps  
8/18/07

  
CHRISTOPHER P. SCHWARTZ  
PRIMARY EXAMINER